

Inspection Report

Open (Above Ground) Sand Filter

Submitted to

CITY OF DURHAM

Stormwater Services Division, Department of Public Works
101 City Hall Plaza, Durham, NC 27701
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| | |
|----------------------------------|--|
| Date of Inspection | |
| Name of Certifier (BMC) | |
| Facility Name | |
| City of Durham Facility ID # | |
| Annual Anniversary Month | |
| Maintenance Access Address | |
| ADC Map Grid (Optional) | |
| GIS Coordinates (Optional) | |
| City of Durham PIN | |
| River Basin (Neuse or Cape Fear) | |
| Water Supply Overlay | |

Adopted City of Durham Design, Inspection, and Maintenance References:

1. *City of Durham Reference Guide for Development*
2. *Owner's Guide to the Maintenance of BMPs Constructed in the City of Durham*
3. *Determining BMP Inspection and Maintenance Costs for Structural BMPs in North Carolina*, Dr. Bill Hunt, NCSU
4. *Stormwater Best Management Practices Manual*, July 2007, NC Division of Water Quality

Inspection Items

(Please refer to the photographic journal of the inspection and to any supplemental [and facility specific] items attached to this inspection report.)

Inflow Channels/Pipes/Slopes

check

- ☐ No additional maintenance is recommended at this time.
- ☐ The inlet areas have eroded. These eroded areas should be repaired.

Comments (**highlighted**):

- ☐ It appears that the by-pass/diversion structure is malfunctioning. Any trash, sediment, or debris blocking the entry or passage of storm flows through the structure should be removed.

Comments:

- ☐ Additional Items/Comments:

Sediment Chamber

- ☐ Trash and debris have collected in the sediment chamber. This material should be removed.

Comments:

- ☐ Approximately 25% (or more) of the sediment chamber has been filled with sediment. This material should be removed.

Comments:

- ☐ The berm (or wall) between the sediment chamber and the sand filter chamber has eroded (or is damaged) and should be repaired.

Comments:

- ☐ Additional Items/Comments:

Sand Filter Chamber

- ☐ No additional maintenance is recommended at this time.
- ☐ The surface of the sand filter bed is overgrown with grass, trees, etc, that were not originally proposed with the design of the facility. These items should be removed from the sand filter bed.

Comments:

- ☐ The sand filter has been silted in (or partially silted in). All contaminated sand should be removed and replaced with clean sand.

Comments:

- ☐ Areas of erosion were noted in the sand filter bed. These areas should be repaired.

Comments:

- ☐ The sand filter chamber is holding water (e.g., for more than 24-hours after a rain event).

Comments:

- ☐ It appears that the sand filter bed material was not installed properly (e.g., either the required bed material was not used or it was not installed to the correct depth). If it is determined that the sand filter bed material was constructed improperly, the sand filter bed will need to be reconstructed to the plan and specifications contained in the approved Construction Drawings.

Comments:

- ☐ It appears that the relief pipes (e.g., under drains) proposed in the approved construction drawings were either not installed or are malfunctioning. If either is the case, the sand filter bed and underdrains may need to be reconstructed.

Comments:

- ☐ Additional Items/Comments:

Berm/Wall (Small Dam Embankment)

- ☐ No additional maintenance is recommended at this time.
- ☐ The berm or wall was not constructed properly and should be reconstructed to the required height and with the required material.

Comments:

- ☐ A portion of the berm has “blown out” (e.g., eroded). The berm should be repaired. Along with the repair, the installation of an armored spillway should be considered. The provision of such a spillway may require that the berm be constructed to a height approximately 6-inches above the height specified in the approved Construction Drawings.

Comments:

- ☐ The wall has been damaged and should be repaired.

Comments:

- ☐ Additional Items/Comments:

Riser

- ☐ No additional maintenance is recommended at this time.
- ☐ The riser is filled with excess material (debris, trash, rock, etc.). This material should be removed. A top trashrack is/is not recommended [disregard comment if a trashrack is already present].

Comments:

- ☐ The top trashrack/anti-vortex device is damaged. The trashrack/anti-vortex device should be repaired or replaced.

Comments:

- ☐ The riser is damaged/deteriorated. The riser should be repaired or replaced.

Comments:

- ☐ Additional items/comments:

Principal Spillway Pipe (PSP)

- ☐ No additional maintenance is recommended at this time.
- ☐ The PSP is blocked. The blockage should be removed.

Comments:

- ☐ One or more joints of the PSP are leaking.

Comments:

- ☐ One or more sections of pipe have settled to a point where the integrity of the dam may be threatened. These sections of pipe may need to be replaced.

Comments:

- ☐ Additional items/comments:

Outfall

- ☐ Not applicable.
- ☐ No additional maintenance is recommended at this time.
- ☐ The outfall is blocked. The blockage should be removed.

Comments:

- ☐ The outfall area is eroded. The eroded area should be repaired.

Comments:

- ☐ Additional Items/Comments:

Plantings

- ☐ No additional maintenance is recommended at this time.
- ☐ Several of the plants provided with the original construction of the facility appear to have died. These plants should be removed and replaced.

Comments:

- ☐ Additional Items/Comments:

Other Maintenance Items

Summary List of Remedial Items to be Completed for Certification

Professional Execution

Name (Signature): _____ Date: _____

Name (Printed): _____

BMC #: _____

NCPE or NCRLA Seal: